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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/757,688 | 01/11/2001 | Wolfgang Heil | PLOVIN-2A | 7991 |

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EXAMINER
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| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 1615 | 17 |

DATE MAILED: 06/26/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|---|---------------------------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/757,688 Examiner Lakshmi S Channavajjala | HEIL ET AL. Art Unit 1615 |
| Period for Reply | -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address -- | |

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 28 May 2002.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 77,81-83 and 85-136 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 77,81-83 and 85-136 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

| | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>15</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Receipt of request for extension of time, prior art with attachment and amendment E, all dated 5-28-02 is acknowledged.

Response to Amendment

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn. Accordingly, the instant amendment has been entered.

Status of claims

Claims 78-80 and 84 have been canceled.

Claims 77, 81-83 and 85-136 are pending.

Claim Objections

Claims 84 and 97 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Independent claims 77 and 90 state that DSRP is micronized. Claims 84 and 97 again recite the same limitation.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686

F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claims 77, 81-83 and 85-136 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3-7, 9-14, 16-19, 21, 22 and 36-40 are of copending Application No. 09/654,227 alone or in view of US 5,922,349 to Elliesen et al (hereafter Elliesen). Although the conflicting claims are not identical, they are not patentably distinct from each other because both the instant claims and the copending claims utilize the same composition containing a first active agent, drospirenone in micronized form and a second active agent, an estrogen. The copending claims do not recite the instant method of treating or preventing the diseases, disorders or symptoms, associated with deficient endogenous levels of estrogen or the use of the instant composition for the above methods.

Elliesen teaches a Hormone Replacement Therapy method comprising administering a combination of estrogen (estradiol) and a progestogen (drospirenone) to successfully treat the hormone deficient conditions in premenopausal or menopausal women, without any adverse side effects.

Therefore, it would have been obvious for one of ordinary skill in the art at the time of the instant invention to use the composition of the copending claims to treat the claimed estrogen deficient conditions or symptoms with the composition of copending claims because Elliesen

suggests that hormone deficient conditions in premenopausal and postmenopausal women can be corrected with a combination of progestogen and estrogen, thus prevent the development of any symptoms or conditions i.e., bone loss and resultant structural deformations, associated with the hormone deficiency.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

2. The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302).

Commonly assigned 09/654,227, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee is required under 37 CFR 1.78(c) and 35 U.S.C. 132 to either show that the conflicting inventions were commonly owned at the time the invention in this application was made or to name the prior inventor of the conflicting subject matter. Failure to comply with this requirement will result in a holding of abandonment of the application.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications filed on or after November 29, 1999.

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3. Claims 77, 81-83 and 85-136 provisionally rejected under 35 U.S.C. 103(a) as being obvious over copending Application No. 09/654,²²⁷ 772 that has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the copending application, it would constitute prior art under 35 U.S.C. 102(e) if published or patented. This provisional rejection under 35 U.S.C. 103(a) is based upon a presumption of future publication or patenting of the conflicting application. The copending claims and the invention are directed to administering a composition containing drospirenone and estrogen to inhibit ovulation and/or hormone irregularities, which encompasses the instant method of treating or preventing conditions associated with deficient levels of estrogen. Therefore, it would have been obvious for one of ordinary skill in the art at the time of the instant invention to use the composition of the copending claims to treat the instant claimed methods.

This provisional rejection might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the copending application was derived from the inventor of this application and is thus not the invention "by another," or by a showing of a date of invention for the instant application prior to the effective U.S. filing date of the copending application under 37 CFR 1.131. For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 77, 81-83 and 85-136 are rejected under 35 U.S.C. 103(a) as being unpatentable over co-pending application 09/654,²²⁷772.

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The copending invention is directed to administering a composition containing drospirenone and estrogen to inhibit ovulation and/or hormone irregularities, which encompasses the instant method of treating or preventing conditions associated with deficient levels of estrogen. In particular, the copending invention utilizes the same composition containing a first active agent, drospirenone in micronized form and a second active agent, an estrogen. The copending application also discloses the instant dosages of the hormones, estrogen and drospirenone. Therefore, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to use the composition of the copending claims to treat the instant claimed methods because the copending application discloses treating hormone irregularities, which includes the hormone deficiencies observed during or at menopause, as in the instant claims. Therefore, one of an ordinary skill in the art would have expected to provide an efficient treatment to correct hormone imbalances with the combination of estrogen and drospirenone of copending claims.

5. Claims 77, 81-83 and 85-136 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 97/11680 to Elliesen et al ('WO) in view of Lingnieres (Clinical Therapeutics).

'WO teaches hormone replacement therapy (HRT) method comprising administering estrogen and a progestogen for the treatment of pre-menopausal and menopausal symptoms (pages 1, 4, 5). WO teaches both oral and transdermal compositions. The estrogen in the composition comprises estradiol and its esters such as valerate, acetate benzoate, and examples of progestogen include drospirenone (page 15). WO suggests the claimed daily doses of estrogen and drospirenone (DRSP). Although, 'WO does not specifically mention the protection of endometrium by DRSP in their composition, they teach the same composition as claimed, including the claimed daily ranges. Therefore, absent showing evidence on the contrary, the composition of WO possesses the ability to protect endometrium. WO teaches examples of progestogen which can be employed in the composition and include micronized progesterone, norethisterone, drospirenone etc (page 15). Examiner notes that applicants' argument that the teaching of "micronized" only pertains to progestogen and not to drospirenone. This argument has been addressed under the "Response to Arguments" below.

WO fails to teach amounts of DSRP in amounts to protect endometrium.

Lingnieres teaches administering a combination of estrogen and micronized progesterone for postmenopausal estrogen/progestin intervention so as to protect pre- and postmenopausal women from endometrial hyperplasia (abstract, page 47, col. 1). Lingnieres suggests administering micronized progesterone for about 10 days during second half of menstrual cycle, so as to effectively prevent endometrial hyperplasia. Examiner notes that instant claims also administer drospirenone, a progestogen, in the second half of the cycle. Lingnieri suggests that

micronization of progesterone substantially increased the bioavailability of the hormone and oral administration of micronized progesterone has been shown to be very effective for controlling endometrial growth (page 42, col. 2). Lingniere suggests progesterone and not DSRP as claimed. However, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to use micronized progestogens, including micronized drospirenone, in the HRT of WO because Lingniere suggested that micronization of the compounds improves the bioavailability and thus circumvents the problems encountered by other routes of delivery (intramuscular, rectal, vaginal etc), gastrointestinal absorption is rapid, as a result of micronization, which increases the amount of surface area of the steroid that comes in to contact with the mucous membranes (paragraph connecting 53-54).

Further, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to use the combination of estrogen and progestogen of WO, to prevent or reduce endometrial hyperplasia in post and premenopausal women because Lingniere suggests that progesterone, in combination with estrogen, is effective in preventing estrogen-dependent endometrial stimulation. Accordingly, one of an ordinary skill in the art would have expected all of the progestogens of WO, including DSRP, to be effective in protecting endometrium from hyperplasia upon administering in combination with an estrogen.

Lingnieres suggests several dosing schedules for estrogen and progesterone. Accordingly, optimizing the amounts and dosages of hormones of WO, depending on the duration of administration, with an expectation to provide maximum therapeutic effect would have been obvious for one of an ordinary skill in the art.

Response to Arguments

Applicant's arguments filed 5-28-02 have been fully considered but they are not persuasive. Upon considering applicants arguments and in light of the instant amendment, examiner has withdrawn previous rejections and made a new rejection. However, the new rejection cites the WO 97/11680, which is already argued by applicants. Applicants argue that that WO fails to teach micronized drospirenone and the only micronized from taught by WO is progesterone because the word "micronized" precedes progesterone and not other progestogens. However, this argument is not persuasive because, the paragraph teaching progestogens clearly states, "examples of progestogens which can be employed in this invention are micronized progesterone, norethisteron....., drospirenone". This clearly suggests the all the progestogens are micronized and not just progesterone. However, assuming that WO fails to teach drospirenone, examiner cited the new reference (Lingniere) showing that micronization improves bioavailability and gastrointestinal absorption. Further, Lingniere suggests that the combination of estrogen and progestogen prevents endometrial hyperplasia. With respect to applicants unexpected results (submitted with response), the new combination of references clearly shows that increase in bioavailability upon micronization is not unexpected by one of an ordinary skill in the art. Therefore, the rejection is deemed to be proper.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lakshmi S Channavajjala whose telephone number is 703-308-2438. The examiner can normally be reached on 7.30 AM -4.00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K Page can be reached on 703-308-2927. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7924 for regular communications and 703-308-7924 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1235.



Lakshmi S Channavajjala
Examiner
Art Unit 1615
June 24, 2002